

ORIGINAL  
RECEIVED

MAY - 5 1993

BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, DC 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In re Applications of	)	MM Docket No. <u>93-88</u>
EZ COMMUNICATIONS, INC.	)	File No. BRH-910401C2
For Renewal of License of FM Radio	)	
Station WBZZ(FM) on Channel 229B	)	
at Pittsburgh, Pennsylvania	)	
ALLEGHENY COMMUNICATIONS GROUP,	)	File No. BPH-910628MC
INC.	)	
For Construction Permit for	)	
a New FM Broadcast Station on	)	
Channel 229B at Pittsburgh,	)	
Pennsylvania	)	

To: Honorable Edward Luton  
Administrative Law Judge

PETITION FOR LEAVE TO AMEND

Allegheny Communications Group, Inc. (Allegheny), by its attorneys, now petitions for leave to amend its application in accordance with the attached amendment.

The Hearing Designation Order, DA 93-361 (released April 5, 1993) ordered Allegheny to amend the engineering portion of its application in several respects. First, Paragraph 18 of

additional certification concerning human exposure to RF radiation. Finally, Paragraph 23 of the HDO asked Allegheny to submit a study concerning possible interference to another station.

The attached amendment provides all of the required information. With respect to the North Madison allotment, the amendment demonstrates that Allegheny's current proposal fully protects the North Madison allotment when Section 73.215 of the Commission's rules is used. The additional statements concerning Allegheny's directional antenna and human exposure to RF radiation are provided. Finally, the amendment provides an interference analysis which demonstrates that Allegheny's station will not improperly interfere with WLER(FM).

Good cause exists for acceptance of the amendment because the amendment is required by the Hearing Designation Order. The amendment does not change Allegheny's proposed facility, so no comparative advantage will result from a grant of this petition.

Accordingly, Allegheny asks the Presiding Judge to accept the attached amendment.

Respectfully submitted,

ALLEGHENY COMMUNICATIONS GROUP,  
INC.

BY

  
Morton L. Berfield

BY

  
John J. Schauble

Cohen and Berfield  
1129 20th Street, NW, Suite 507  
Washington, DC 20036  
(202) 466-8565

Its Attorneys

Date: May 5, 1993

AMENDMENT

The application of Allegheny Communications Group, Inc. for a construction permit for a new FM broadcast station on Channel 229B

**ENGINEERING STATEMENT COVERING  
AMENDMENT TO APPLICATION FOR CONSTRUCTION PERMIT  
FOR ALLEGHENY COMMUNICATIONS GROUP, INC.**

**CHANNEL 229B 93.7 MHz**

**43.5 kW MAX. (DA) @ 157.5 METERS HAAT**

**PITTSBURGH, PENNSYLVANIA**

**FILE NO. BPH-910628MC**

**AMENDED APRIL 1993**

**ENGINEERING STATEMENT COVERING  
AMENDMENT TO APPLICATION FOR CONSTRUCTION PERMIT  
FOR ALLEGHENY COMMUNICATIONS GROUP, INC.  
CHANNEL 229B 93.7 MHz  
43.5 kW MAX. (DA) @ 157.5 METERS HAAT  
PITTSBURGH, PENNSYLVANIA  
FILE NO. BPH-910628MC**

**AMENDED APRIL 1993**

**SUMMARY**

This statement supports an amendment to the pending Application for Construction Permit filed by Allegheny Communications Group, Inc. ("Allegheny") for a new FM broadcast station on Channel 229B at Pittsburgh, Pennsylvania, File No. BPH-910628MC.

The instant amendment will serve to address the engineering issues raised in the Hearing Designation Order ("HDO") released on April 5, 1993 in the proceeding in MM Docket No. 93-88, and as described in the following paragraphs and exhibits.

**ADDRESSING OF SHORT SPACING TO NORTH MADISON, OHIO ALLOTMENT**

Paragraph 18 of the HDO indicates that the proposed Allegheny transmitter site is short spaced to a new allotment at North Madison, Ohio on Channel 229A and must amend its application accordingly in order to eliminate the conflict. The proposed Allegheny site is located 173.5 km from the North Madison, Ohio allocation coordinates. The minimum distance separation requirement, specified in the table in *Section 73.215(e)*, between co-channel Class A and Class B facilities is 143 km. Allegheny clearly meets the requirements as specified in *Section 73.215(e)* and, therefore, requests *Section 73.215* processing with regard to the North Madison, Ohio allocation. *Figure 1*, attached, is a *Section 73.215* contour clearance showing based on *Section 73.207* minimum distance separation standards which depicts the lack of prohibited overlap between a maximum Class A 6 kW allotment at the North Madison, Ohio reference coordinates and the proposed Allegheny facility. The Allegheny contours have been determined utilizing the directional antenna data as filed with the August, 1991 amended Allegheny application.

No additional modification of the antenna pattern was required in order to achieve contour clearance as the major lobe of the proposed **Allegheny** facility is in the direction of the North Madison allotment.

**SECTION 73.316 DIRECTIONAL ANTENNA COMPLIANCE**

Paragraph 20 of the HDO requires **Allegheny** to provide the supporting statements specified in *Sections 73.316(c)(5) and (7)* of the Rules with respect to the proposed directional antenna installation. Accordingly, **Allegheny** asserts the following regarding its proposed facility.

**Allegheny** proposes to install an ERI-DA-1005 3 bay, or equivalent, directional FM antenna. The antenna will be side mounted on an existing 73.5 meter steel structure. In accordance with *Section 73.316* of the Rules, the applicant certifies as follows:

1. The ratio of minimum to maximum radiation does not exceed 15 dB.
2. The proposed radiation pattern will not vary by more than 2 dB per 10 degrees of azimuth change.
3. The proposed ERI directional antenna pattern is based on a measured pattern from the ERI test range.
4. The antenna will be side mounted on the existing tower in accordance with the manufacturer's specific installation instructions.
5. No platform is located within one wave length of the antenna.
6. No other antenna will be mounted at the same tower level as the proposed directional antenna. No antenna of any type will be mounted horizontally or vertically within a distance less than that specified by the manufacturer for proper directional operation.

7. During antenna installation, a qualified broadcast engineer will supervise the installation and certify that the antenna has been installed pursuant to the manufacturer's instructions.

**Allegheny** has taken the appropriate steps to work with AT&T, the tower owner, in order to ensure compliance with the Rules and the manufacturer's instructions for installation of the proposed antenna. Specifically, AT&T assures **Allegheny** that it is in the process of deactivating a number of antennas not in use which are currently on the tower. AT&T further agrees that, when the construction permit for the proposed **Allegheny** facility has been granted, it will undertake final coordination with **Allegheny** to provide final antenna data to the FM antenna manufacturer for inclusion in its studies with respect to ultimate antenna design.

#### **ANSI COMPLIANCE**

Paragraph 22 of the HDO requires **Allegheny** to submit a certification regarding potential worker exposure with respect to RF radiation and compliance with ANSI guidelines. It is noted that a complete analysis of all potential RF contributors was included in **Allegheny's** January, 1992 engineering response to EZ Communications' Petition to Deny the **Allegheny** application. The analysis determined that the ANSI standard of 1 mw/cm<sup>2</sup> is not exceeded when the cumulative percentages of power density of all stations currently operating on the tower are considered on either the roof or ground surrounding the tower base. **Allegheny** further stated that it would be willing to certify the actual RF radiation amounts by the taking of measurements prior to filing a 302 license application.

In its August, 1991 amended application, **Allegheny** further stated that a policies and procedures plan would be established concerning worker exposure which would include the posting of warning signs, monitored maintenance logs and limited time access on the tower, as well as reducing or eliminating its transmitter power during such time as workers are on the

tower, if required. At this time, Allegheny further certifies that, prior to commencing operation, an agreement will be in effect with any and all existing stations on the tower to reduce or cease operation, as necessary, to assure worker safety when maintenance is to be performed at the site.

#### **POTENTIAL RECEIVER INDUCED INTERMODULATION INTERFERENCE**

Paragraph 23 of the HDO raises a concern regarding potential intermodulation interference between the proposed Allegheny Channel 229B (93.7 MHz) facility and WORD, Pittsburgh, Pennsylvania, on Channel 284B (104.7 MHz) and WMXP, New Kensington, Pennsylvania, on Channel 264B (100.7 MHz) on the frequency of WLER-FM, Butler, Pennsylvania, Channel 249A (97.7 MHz). With respect to this issue, the following analysis has been performed.

RITOIE classically occurs when two stations are co-located, or essentially so, and an intermodulation product occurs within nearby receivers that causes interference to the received signal of a third station in the market. The area of interference, RITOIE, is generally located between the 115 dBu blanketing contour and the 100 dBu contour as a worst case condition. Any interference is generated in the front end of a receiver and is not transmitted by the stations.

Paragraph 23 of the Commission's Order describes a possible intermodulation problem between three transmitting stations to a fourth station. The potential interference problem described in the order can only exist when the proposed Allegheny frequency (93.7 MHz) is added to the frequency of WORD (104.7 MHz) and the frequency of WMXP-FM (100.7 MHz) is subtracted from the total, leaving an interfering signal on 97.7 MHz which is the frequency of operation for Class A station WLER, Butler, Pennsylvania. This is not a classical RITOIE problem but rather a classic third order intermodulation problem normally handled with filters in the transmitting systems of the involved stations.

The relationship of the other stations to the proposed Allegheny site are as follows:

<u>Call</u>	<u>Dist. kM</u>	<u>Bearing Degrees</u>	<u>Facilities</u>
WMXP	0.2	187.3	Ch 265B 17 kW, RC 563 meters AMSL - LIC
WORD	20.6	65.7	Ch 284B 50 kW, RC 471 meters AMSL - LIC
	0.2	187.3	Ch 284B 19 kW, RC 546 meters AMSL - CP, BPH-9002281A
WLER	45.5	12.4	Ch 249A 4.6 kW, RC 496 meters AMSL - LIC

It is believed that all engineers would agree that the licensed WORD facility is too distant from the proposed Allegheny and licensed WMXP sites for interference of any type to exist. Therefore, the interference to be studied is that between the proposed Allegheny facility, the WORD CP facility, WMXP and WLER.

*Figure 2*, attached, depicts the WLER primary, protected 60 dBu contour and the possible interference area of Allegheny, WORD and WMXP. The closest point on the WLER 60 dBu contour is 8.6 kM, 5.4 miles from the worst case interference contour for the three involved facilities.

The intermodulation scenario that the Commission has set forth is a third order intermodulation product normally caused by the mixing of signals in the transmission systems. Allegheny stipulates that it will take full responsibility for the elimination of any objectionable interference within the primary protected service contour of any facilities in existence, facilities authorized, and to fixed radio receivers in use prior to grant of its application.

Allegheny will coordinate fully with WMXP and WORD and will accept full financial responsibility for the purchase and installation of any transmission filters necessary to

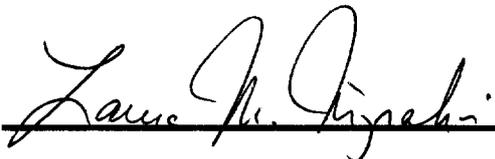
eliminate a mixing product on 97.7 MHz, the frequency of WLER-FM. These steps will assure that the transmission plants of the three stations meet the Commission's purity of emission standards set forth in *Section 73.317* of the Rules and Regulations.

Current FOB and Mass Media Bureau policy state that a station cannot receive protection from interference outside its predicted primary service contour. This is consistent with *Section 73.215(a)(1)* and *Section 73.311* of the Rules. Accordingly, Allegheny's commitment with regard to WLER is believed properly limited to the area within that station's 60 dBu predicted service contour.

**CONCLUSION**

This statement is believed to be fully responsive to the engineering questions raised in the Hearing Designation Order concerning Allegheny.

The foregoing was prepared on behalf of Allegheny Communications Group, Inc. by Laura M. Mizrahi of *Communications Technologies, Inc.*, Marlton, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The statements herein are true and correct of her own knowledge, except such statements made on information and belief, and as to these statements she believes them to be true and correct.

By 

Laura M. Mizrahi  
for Communications Technologies, Inc.  
Marlton, New Jersey

SUBSCRIBED AND SWORN TO before me

this 30<sup>th</sup> day of April, 1993,

Esther G. Sperbeck, NOTARY PUBLIC

ESTHER G. SPERBECK  
NOTARY PUBLIC OF NEW JERSEY  
MY COMMISSION EXPIRES OCT 15, 1997

CERTIFICATE OF SERVICE

I, Susie Cruz, do hereby certify that on the 5th day of May 1993, a copy of the foregoing "Petition for Leave to Amend" was sent first-class mail, postage prepaid to the following:

Paulette Y. Laden, Esq.\*  
Robert A. Zauner, Esq.  
Hearing Branch  
Federal Communications Commission  
2025 M Street, N.W., Room 7212  
Washington, D.C. 20554

Rainer K. Kraus, Esq.  
Herbert D. Miller, Esq.  
Koteen & Naftalin  
1150 Connecticut Avenue, NW  
Suite 1000  
Washington, DC 20036  
Counsel for EZ Communications, Inc.

  
Susie Cruz

\*HAND-DELIVERED

WLER-FM CH 249A  
+ BUTLER, PA

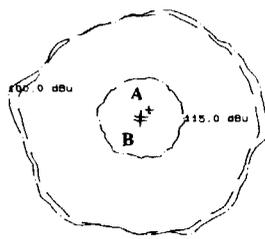
+N 40 45 0  
+W 80 30 0

+N 40 45 0  
+W 79 30 0

60.0 dBu

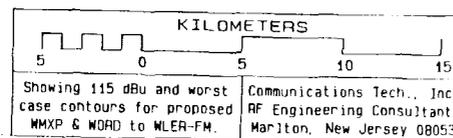
+N 40 30 0  
+W 80 30 0

+N 40 30 0  
+W 79 30 0



A = ALLEGHENY COMM. PROP.  
CH 229B

B = WMXP CH 264B, WORD CH 284B



Transverse Mercat

MIXING PRODUCT STUDY

ALLEGHENY COMM. GROUP, INC.

APRIL 1993

FIGURE 2

+N 42 0 0  
+W 86 0 0

+N 42 0 0  
+W 78 0 0

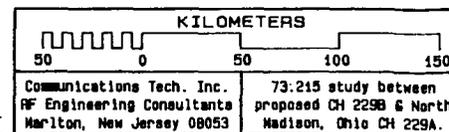
PROPOSED CH 229A  
6 kW @ 100 M HAAT  
(BASED ON FCC  
REF. COORDINATES)

PROPOSED CH 229B  
43.5 kW MAX.  
@ 157.5 M HAAT

+N 40 0 0  
+W 78 0 0

+N 38 0 0  
+W 86 0 0

Albers



ALLOCATION MAPPING  
Allegheny Comm. Group, Inc.

April 1993

Figure 1